REMARKS

Claims 7-12, 14-16 and 18 are pending. Claims 7-12, 14 and 15 have been amended. Claim 18 has been added as new. Claims 1-6, 13 and 17 have been cancelled without prejudice. Support for amended claims 7-10 and new claim 18 can be found in the specification on page 5, lines 15-28; and page 7, lines 5-25. Support for amended claims 11 and 14 can be found in the specification on page 9, lines 24-26. Support for amended claims 12 and 16 can be found in the specification on page 10, lines 3-4. It is respectfully submitted that no new matter has been introduced in this amendment.

I. Objection to the Specification

In the Office Action, the Examiner objected to the disclosure because "it contains an embedded hyperlink and/or other form of browser-executable code."

This objection is traversed. Applicant has amended the specification by deleting reference to the embedded hyperlink and/or browser-executable code. Therefore, Applicant respectfully requests that the Examiner remove the objection.

II. Objection to the Claims

In the Office Action, the Examiner objected to claim 8 for being in improper dependant form. In response, claim 8 has been amended to independent form. Accordingly, the Examiner's objection is moot. Therefore, Applicant respectfully requests that the Examiner's objection be removed.

III. Rejection under 35 U.S.C. § 112, second paragraph

In the Office Action, the Examiner rejected claim 5 as being indefinite. In response, claim 5 has been cancelled without prejudice. Accordingly, the Examiner's rejection is moot. Therefore, Applicant respectfully requests that the Examiner's rejection be removed.

IV. Rejection under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-4, 6-8, 11, 12 and 16 under 35 U.S.C. § 102 (b) as being anticipated by Wakita, et al. (referencing Wakita and Wands (1994, J. Biol. Chem., v.269:14205-14210).

This rejection is traversed. Claims 1-4 and 6 have been cancelled without prejudice. Amended claims 7-8, 11, 12, and 16 are directed to siRNAs, which inhibit HCV expression. Also nucleotide sequences of claimed siRNAs are specified with reference to certain specific sequential ID Nos. The present inventors have found that the specified siRNAs can strongly inhibit replication of a hepatitis C virus.

Wakita, et al. is directed to the use of antisense RNAs. The Wakita and Wands reference is directed to the use of antisense oligodeoxynucleotides. These documents are both silent about siRNAs, to which claims 7-8, 11, 12, and 16 as amended are directed. They do not teach that the siRNAs of the present invention can inhibit replication of a hepatitis C virus. Accordingly, claims 7-8, 11, 12, and 16 are not anticipated by the Wakita, et al reference (or the Wakita and Wands reference disclosed therein). Therefore, Applicants respectfully request that the Examiner's rejection be removed.

V. Rejection under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 1-8 and 12 under 35 U.S.C. § 103(a) as being obvious over Seki, et al. and Bass.

This rejection is traversed. Claims 1-6 have been cancelled without prejudice.

Bass describes that RNAi has repeatedly proven itself to be more robust than antisense techniques. It works more often, and typically decreases expression of a gene to lower levels or eliminates it entirely; and that siRNAs are effective at concentrations that are several orders of magnitude below the concentrations typically used in antisense experiments. It is the Examiner's position that the disclosure of the Bass reference would motivate those skilled in the art to use

SEQ ID No. 23 of the present invention as an siRNA instead of the antisense oligonucleotide of SEQ ID No. 83 in Seki, et al. to arrive at the present invention. Applicant respectfully disagrees.

First, the disclosure of the Bass reference does not disclose that an siRNA is more effective in comparison to an antisense oligonucleotide that is complimentary to the siRNA. Bass provides no information about a relationship between sequences of the siRNA and the antisense oligonucleotide which are compared therein. Therefore, one skilled in the art would not have had reason to use SEQ ID No. 23 of the present invention as an siRNA instead of the antisense oligonucleotide of SEQ ID No. 83 in Seki, et al. to arrive at the present invention.

Second, in Seki, et al. variety of antisense compounds are described. Although it is true that the antisense compound of SEQ ID No. 83 is referred to as one of the preferred antisense compounds (See: page 23, lines 14 to 18 of Seki, et al.) it is excluded form the most preferred antisense compounds (See: page 13, line 24 to page 14, line 13 of Seki, et al.). Therefore, one skilled in the art would not expect that the siRNA having a sequence complimentary to SEQ ID No. 83 can strongly inhibit replication of a hepatitis C virus.

Third, both the Seki, et al. and Bass references do not teach or suggest siRNAs of the present invention having the specified nucleotide sequences, such as SEQ ID No. 23, strongly inhibit replication of hepatitis C.

The Examiner's position is based on impermissible hindsight. Accordingly, claims 7-8 and 12 are not obvious over the Seki, et al. reference in view of the Bass reference. Therefore, the Examiner's rejection should be removed.

Conclusion

This Amendment is being submitted together with a petition for a 3-month extension of time. The Commissioner of Patents is hereby authorized to charge $1,050.00 for the fee due under 37 C.F.R. §1.17(a)(3). It is believed that no further fees are due for this submission. If it is determined that additional fees are due or that any fee has been overpaid, the Commissioner for Patents is hereby authorized to charge said fee or credit any overpayment to Deposit Account No. 50-0552.

An early and favorable action on the merits is earnestly solicited.

Respectfully submitted,
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